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Serial No.: CONTINUATION OF 09/879,347 00-142  
Filed:

In the Claims

Please cancel claims 1 through 33 and add claims 34 through 44 as follows:

Claims 1-33 (canceled)

34 (new). In a data processing system with a host and a data storage facility including a cache memory, a standard storage device for receiving write commands and data from the host through the cache memory and a BCV mirror storage device for backing up the standard storage device wherein each of the storage devices comprises a plurality of tracks on a physical disk and the BCV mirror storage device operates either in a first, write-enabled, mirror mode for mirroring the first storage device or in a split mode isolated from the first storage device, a track identification table for each of storage device defining the status of the data in each track of the standard and BCV mirror storage devices, a data recovery program for restoring data in the standard storage device comprising:

A) a program step for attaching the BCV mirror storage device in a read-only state to the standard storage device,

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- 20 B) a program step for identifying tracks to be restored  
from the BCV mirror storage device to the standard  
storage device, and
- C) a program module for initiating concurrent  
restoration and updating of the data in each track to  
be restored by performing the steps of:
- 25 i) copying the data from the identified track in  
the BCV mirror storage device to the cache  
memory in response to the information in the  
track identification table associated with the  
standard storage device,
- 30 ii) transferring update data received from the host  
for the track to the cache memory, and
- iii) responding to a predetermined track status for a  
standard storage device track by transferring  
corresponding data from the cache memory to the  
standard storage device.

35 (new). A data recovery program as recited in claim 34  
additionally including a step of identifying the locations  
in the standard storage device that are altered during the  
updating procedure.

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36 (new). A data recovery program as recited in claim 35  
wherein each said update transfer comprises a writing  
process that writes data to the standard storage device  
and wherein said program additionally comprises a program  
5 step for monitoring the operation of the copying and  
writing processes to enable the restoration and update  
transfers.

37 (new). A data recovery program as recited in claim 36  
wherein each of the data storage devices maintains status  
information for monitoring the validity of the data in the  
storage locations of the standard and BCV mirror storage  
5 devices and wherein said step of data copying transfers  
data to a storage location in the standard storage device  
prior to a write operation whereby the status information  
for the standard and BCV mirror storage devices indicate  
that the data in those locations are invalid and valid,  
10 respectively.

38 (new). A data recovery program as recited in claim 37  
wherein each update transfer writes an entire storage  
location in the standard storage device and wherein the  
writing process causes the status information to indicate

5           that the data in the standard and BCV mirror storage  
          devices are valid and invalid, respectively.

39 (new). A data recovery program as recited in claim 37  
          wherein an update transfer step writes a portion of a  
          storage location in the standard storage device, said  
          writing process causing the status information to indicate  
5           that the data in the storage locations in the standard and  
          BCV mirror storage devices are invalid and valid,  
          respectively, whereby said copy process initiates a  
          transfer of the combined written data and data from the  
          BCV mirror storage device to the storage location in the  
10           standard storage device.

40 (new). A data recovery program as recited in claim 37  
          wherein each of the data storage devices has associated  
          status information for monitoring the validity of the data  
          in the storage locations of the standard and BCV mirror  
5           storage devices and wherein an update transfer step writes  
          data to a storage location in the standard storage device  
          prior to the restoration procedure, the transfer of data  
          to a location in the standard storage device by the  
          writing process being dependent upon an indication in the

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10 status information of valid data in the standard storage  
device location.

41 (new). A data recovery program as recited in claim 37

5 wherein each of the data storage devices has associated  
status information for monitoring the validity of the data  
in the storage locations of the standard and BCV mirror  
storage devices and wherein an update data transfer step  
writes data to a portion of a storage location in the  
standard storage device prior to the restoration  
procedure, the writing process leaving the status  
information unchanged whereby subsequently the copy  
10 process initiates a transfer of the combined data in the  
corresponding location of the BCV mirror storage device  
and the written data to the location in the standard  
storage device.

42 (new). A data recovery program as recited in claim 41

5 wherein said data copying additionally includes the step  
of causing the status information for the storage  
locations in standard and BCV mirror data storage devices  
to assume invalid and valid states, respectively.

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43 (new). A data recovery program as recited in claim 34

wherein said copying of data by the restoration procedure includes an identification of all the data in the BCV mirror storage device.

44 (new). A data recovery program as recited in claim 34

wherein the standard and BCV mirror storage devices are further characterized by a second identification of data that reflects changes in the standard storage device after the BCV mirror storage device transfers to the second operating mode, said first identification of data to be transferred by the restoration procedure being set to correspond to the second identification.

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